Quality Control

Work Order ID 123723 Monday, August 18, 2014 2:38:01 PM		*123	3723*						Page 1	
Item ID: D3501-1 Revision ID:		Accept	*N900	040	10) *	Setup Sta	1 71	S1*	
Item Name: Bushing							Sto	P *N	S2*	
Start Date: 8/18/14 Start Qty: 60	··················*60*		Cust Item 1	D:						
Required Date: 8/18/14 Req'd Qty: 60 Reference:	^{.00} *60*		Customer:							
Approvals: Process Plan: MUJ	Date: 14-08-7	⊘ Tooling:	D:	ate:	_	I	Run Sta	^ I/J	R1*	
QC:	Date:	_ SPC (Y/N):	Da	ate:			Sto	, *V	R2*	
Sequence ID/ Operation Work Center ID Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr Revision Nbr							· -			
D3501 Rev A									•	
100	TT 17 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.00				_				
100 Hardinge CNC LAT		0.00				43	· Ø		JE 2014-1	18-28
Memo	NAS PER FOLIO FA650 & DV	0.00 WG D3501 ,FOLIO 2-DEBURR AS REQUIRI	ED				·		79.	
110 QC2- Inspect parts	off machine FAI/FAIB	0.00	` .							
110						43	φ_		OK ZO14-0	XC- 81
QC Memo Quality Control		0.00							0,000,0	, 22
120 QC8- Inspect parts	- second check	0.00	on [14]	/_/						
120 QC Memo		0.00	C3 14/	08/3	0	43	0			

DQA:			Date:			WORK ORDER NON	DART						
QA Closed:			Date:			WORK ORDER NOW	-00	JINFOI	RIVIAINCE / C		Vork Order uj	odate only	AEROSPACE
Work Orde	or.					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
WORK OT at					 .	Rework]		Skid-tube	Crosstube	\neg	Water Jet	Engineering
Part N	۱o. <u> </u>					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
NCR N	No					Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root					Desci	iption of work order update		Initial	A	ction	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling												=	
Handling/Pre	Н	:											
Material	H												
Operator	\vdash												
Offset/Setup Process	\vdash												
Supplier	\dashv												
Training	H												
Transport	\forall												
Unapproved	\Box												
	L I						FAI	ULT CA1	EGORY	-	<u> </u>	<u> </u>	
Landi	ng Ge	ar				General				_	***************************************		
	В	ending				Bend		Folio/P	rogram		Outside Dim	ensions	Pressure/Forced
	c	entre No	t Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
	C	racks				Broken/Damage/Defect		Hardwa	re		Part Incorre	ct	Temperature/Cure
	c	rimp/Kin	k/Ripple	/Wave		Burrs		Inspecti	on Incomplete/U	Jnqualified [Part Lost/Mi	ssing	Weld
	Щc	uffs				Contamination		Instruct	ions Incomplete,	/Unclear	Part Moved		Wrong Stock Pulled
		rushing				Countersink •		Misalig	ned/off center		Positioned V	Vrong	_
	Щ	eat Trea	t			Cut Too Short		Mislabe	led		Power Loss/	Surge	Other
		•	n Strip in	Tube	—	Drawing		Misread	1				
		1arks/Ch			_	Drill Holes	_	Off-set					
	_		equence			Finish	<u> </u>	Out of 0	Calibration				
	l ۷	Vave/Tw	ist in Tub	e		Fit/Function	1	Out of S	Sequence				

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Work	Order ID	123723

Monday, Augus				*12:	3723*							Page	e 2
Item ID: Revision ID: Item Name:	D3501-1 Bushing			Accept	*N900	040	100)*	Setup	Start Stop	171	S1* S2*	
Start Date: Required Date Reference:	8/18/14 : 8/18/14	Start Qty: 60.00 Req'd Qty: 60.00	*60* *60*		Cust Item I Customer:	D:							
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		nte:			Run	Start Stop	^I\]	R1* R2*	
Sequence ID/ Work Center I 130 *1.20* Packaging Packaging	D	Operation Description Identify as per dwg & Sto	ck Location:	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Qty	7	Reject Number	Insp. Stamp	DA: 32 8-8 9
140 *140* QC Quality Control		QC21- Final Inspection -	Work Order Release	0.00				_M	_5_		<u> </u>	_	_

MUJ 14-05-03

DQA:		_ Date:										***	raíac.
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / U		ork Order ug	odate only 「		AERÖSPACE
Work Order				•	DISPOSITION		"			PARTMENT	,		
Part No NCR No					Rework Scrap Use-as-is Suspected Unapproved			Skid-tube Machining moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root				Desc	ription of work order update	!	nitial	Act	tion	Sign &			
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	n	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved													
						FA	ULT CAT	TEGORY					
Landing	Gear				General	- FA	JET CAT	ILGONI					
	Cracks Crimp/Ki Cuffs Crushing Heat Treading Inspection Marks/Cl	at In Strip in	/Wave Tube		Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	ion Incomplete/Ur tions Incomplete/U gned/off center eled d	· —	Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned W Power Loss/	tolerance ct ssing Vrong	Se Te W	essure/Forced et-up emperature/Cure feld frong Stock Pulled
	Wave/Tv	vist in Tub	e		Fit/Function		Out of S	Sequence					

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Monday, August 18, 2014 2:38:01 PM

Work Order ID: 123723

123723

Parent Item:

D3501-1

D3501-1

Parent Item Name: Bushing

Start Date: 8/18/14

Required Date: 8/18/14

Page 1

Start Qty: 60.00

Required Qty: 60.00

Comments:

IPP Rev:A New Issue 06-05-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Primary Item Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	_
M303R0.750		Purchased	No		100	f	54.9760	0.0791	5	\(\frac{1}{2}\)			_
M303R0	750							**					

303 Round Bar 0.750

Location	Loc Oty	Loc Code
MAT028	54.976	
m127464	46.782	
m129366	1.294	
m130043	6.9	

3.9 JFC 2014-08-28

DQA:		Date:			WORK ORDER NON-CONFORMANCE / UPDATE								DART	
QA Closed:		Date:			WORK ORDER NON-	-((JNFOI	RIVIANCE / UF		Wor	k Order up	odate only		AEROSPACE
Work Orde	r·				DISPOSITION				AGAINST I	DEP	ARTMENT	/PROCESS		
Part N		,	············		Rework Scrap			Skid-tube Machining	Crosstube Small Fab		Pro	Water Jet d. Eng. Coor.] E	ngineering Quality
NCR N	0.				Use-as-is Suspected Unapproved		Thern	noforming Large Fab	Finishing Composite		Rec/Stor	re/Packaging Supplier		Other
Root				Desci	ription of work order update	1	Initial	Acti	ion		Sign &			
Cause	Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	iption		Date	Verification		QC Inspector
Design														
Doc/Data														
Equip/Tooling														
Handling/Pre														
Material														
Operator														
Offset/Setup		}												
Process		ļ												
Supplier														
Training		ļ												
Transport								,						
Unapproved	_					L								
						FAI	ULT CAT	regory						
Landin	g Gear				General			i e	_			_		
	Bending				Bend		Folio/P	rogram	Į.	c	outside Dime	ensions	Pre	ssure/Forced
	Centre No	ot Concer	ntric		BOM/Route		Grain		L	c	ver/Under	tolerance	Set	:-up
	Cracks				Broken/Damage/Defect		Hardwa	re		P	art Incorrec	ct	Ter	nperature/Cure
	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspecti	on Incomplete/Un	qualified	P	art Lost/Mi	ssing	We	ld
	Cuffs				Contamination		Instruct	ions Incomplete/U	nclear	P	art Moved		Wr	ong Stock Pulled
	Crushing				Countersink		Misalig	ned/off center		P	ositioned W			
	Heat Trea	at			Cut Too Short		Mislabe	led]P	ower Loss/S	Surge	Oth	ner
	Inspectio	n Strip in	Tube		Drawing		Misread	i	_					
	Marks/Ch	natter			Drill Holes		Off-set							
	Turning S	equence			Finish		Out of 0	Calibration						
. [Wave/Tw	ist in Tuk) 6		Fit/Function		Out of s	Saguanca						

DART AEROSPACE LTD	Work Order:	23723
Description: Bushing	Part Number:	D3501-1
Inspection Dwg: D3501 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

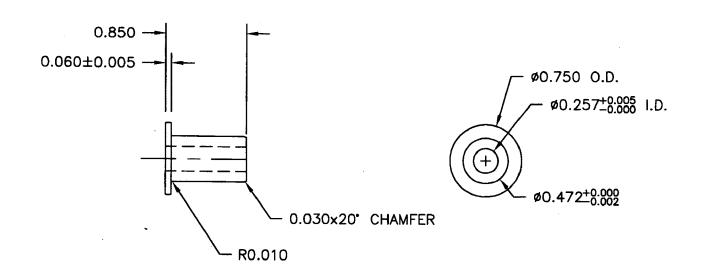
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.850	+/-0.010	0.849	~		Caliper	Jfc-01
0.060	+/-0.005 +0-008/20-007	0.060	7		MICOT	JH-02
Ø0.750	+0.008/=0.001	0.746	✓		Caleper	Ofe-01
Ø0.257	+0.005/-0.000	0.26.0	\vee		1,1	l i
Ø0.472 ^L	+0.000/-0.002	0.471	V		mico-1	JK-02
					<u>, "</u>	

Measured by: JFC	Audited by:	and .	Prototype Approval:	N/A
Date: 2014-08-38	Date:	14/08/30	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	06.10.27	New Issue	KJ/JLM	
	_		• ()	

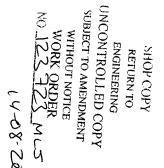


DESIG	P	DRAWN BY		ROSPACE LTD FRY, ONTARIO, CANADA	
CHEC	(ED #	APPROVED ML	DRAWING NO.	RE	V. A
	#	M	D3501	SHEET 1 C	OF 1
DATE			TITLE	so	ALE
06.04.18			BUSHING		1:1
A		06.04.18	NEW ISSUE		



D3501-1 BUSHING

- 1) MATERIAL: AISI 303 SS (REF DART SPEC. M303R)
- 2) FINISH: NONE
- 3) BREAK ALL UNMACHINED SHARP CORNERS 0.010 MAX
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES





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